

IN THE CLAIMS:

1. (Currently Amended) An electrical distribution device comprising an input for connection ~~of~~ to an incoming electrical line, electrical protection means connected to the input and comprising electrical distribution feeders ~~designed to supply~~ for supplying electrical loads, said protection means comprising:

~~—aa~~ aa main part comprising main breaking means connected to the input ~~for connecting the incoming electrical line~~, and main control means for controlling opening and closing of the main breaking means, and

~~—an electrical power distribution line connected to the main breaking means of the main part, and~~

~~—at~~ at least one secondary part separated from the main part and comprising at least one secondary breaking device and secondary control means ~~to command~~ for commanding opening and closing of at least one secondary breaking device, said at least one secondary breaking device ~~being connected for connection to said an electrical power distribution line and to at least one electrical distribution feeder, the secondary control means for enabling opening of at least one secondary breaking device if a~~

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current flowing in said breaking device is lower than a preset opening current threshold.

2. (Currently Amended) The distribution device according to claim 1, wherein the main control means comprise first detection means for detecting a main fault current and first control means for commanding opening of the main breaking means during a preset first time, said first detection means for detecting a main fault indicated by a signal representative of ~~when a first main fault current threshold is being exceeded by a signal representative of a~~ current value of a current flowing in the main breaking means.

3. (Currently Amended) The distribution device according to claim 2, wherein the first control means ~~command~~ is for commanding opening ~~of the~~ main breaking means after a time delay having a preset second duration and ~~subsequent to detection of a~~ main fault.

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4. (Currently Amended) The distribution device according to claim 2, wherein the maximum value of the preset first time delay is ten milliseconds.

5. (Currently Amended) The distribution device according to claim 1, wherein the main part comprises a ~~tie~~head breaker connected to the input for connecting an incoming electrical line and connected in series with the main breaking means.

6. (Currently Amended) The distribution device according to claim 1, wherein the main breaking means are breaking means ~~with comprising~~ power semi-conductors.

7. (Currently Amended) The distribution device according to claim 1, wherein the secondary control means comprise second detection means for detecting a secondary fault current flowing in at least one secondary breaking device, and second control means for commanding opening of said at least one secondary breaking device if a secondary fault has been detected and if a current flowing in said breaking device is lower than the preset

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opening current threshold, said second detection means for detecting a secondary fault—when indicated by a signal representation of a second secondary fault threshold—is being exceeded by a signal representative of a current flowing in said at least one secondary breaking device.

8. (Currently Amended) The distribution device according to claim 7, wherein the second detection means for detecting a secondary fault current flowing in at least one secondary breaking device comprise means for detecting a ~~polar~~ fault corresponding to at least one current flowing in at least one conductor of said at least one secondary breaking device.

9. (Currently Amended) The distribution device according to claim 7, wherein the second detection means for detecting a secondary fault current flowing in at least one secondary breaking device comprise means for detecting a ground fault current flowing in at least two conductors of said at least one secondary breaking device.

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10. (Currently Amended) The distribution device according to claim 1, wherein at least one secondary breaking device is comprises an electromagnetic relay.

11. (Currently Amended) The distribution device according to claim 1, wherein at least one secondary breaking device comprises a breaking device with electronic power components.

12. (Currently Amended) The distribution device according to claim 1, ~~comprising a communication line and~~ wherein at least one secondary part comprises secondary control means comprising communication means ~~connected to the~~ for connection to a communication line, said communication means ~~being able to receive~~ for receiving closing information to close at least one secondary breaking device.

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13. (Currently Amended) The distribution device according to claim 12, comprising a central unit ~~connected to the~~ for connection to a communication line to receive status information and to command opening and/or closing of at least one secondary breaking device.

14. (Currently Amended) The distribution device according to claim 12, wherein the primary control means comprise communication means connected to ~~the~~ a communication line to receive control signals.

15. (Currently Amended) The distribution device according to claim 14, wherein secondary control means ~~send~~ is for sending a priority signal with different ~~second~~ characteristics different from first characteristics of an information communication signal on ~~the~~ a communication line to command opening of the main breaking means when an electrical fault is detected in a feeder supplied by a secondary breaking device and to command closing of the main breaking means when opening of a secondary breaking device has been commanded following a fault,

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the primary control means comprising means for detecting said priority signal and for commanding opening and closing of the main breaking means according to the presence of said priority signal.

16. (Currently Amended) The distribution device according to claim 1, wherein at least one secondary part is arranged located in a building electrical distribution or connection box.

17. (Currently Amended) The distribution device according to claim 1, wherein at least one secondary part is arranged located in a building automation communication module, the secondary control means of said secondary part comprising electrical protection functions and communication and automatic control functions ~~to command~~ for commanding secondary breaking devices.

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18. (Currently Amended) The distribution device according to claim 12, further comprising a flat cable connected to the electrical distribution device, the flat cable comprising at least five conductors comprising an electrical ground line comprising at least one conductor, ~~wherein an electrical power distribution line comprising at least two conductors, a communication line comprising at least two conductors, and an electrical earth or ground line comprising at least one conductor are arranged in a flat cable comprising at least five conductors.~~

19. (Currently Amended) An electrical installation comprising the electrical distribution device according to claim 1, an incoming electrical line connected to the electrical distribution device, ~~an electrical distribution device connected to the incoming electrical line, and a plurality of distribution lines connected between the electrical distribution device and electrical apparatuses or loads, wherein the distribution device is a distribution device according to claim 1 having a said main part~~ is connected to the incoming electrical line and said at

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least one secondary part is connected to said plurality of distribution lines.

20. (Currently Amended) An electrical protection process for an electrical distribution device, comprising:

~~a first step of detection of~~detecting an electrical fault in main breaking means,

~~a second step of detection of~~detecting an electrical fault in secondary breaking means connected by a distribution line to the main breaking means,

~~a time delay step~~delaying said protection process,

~~an opening step of the~~ main breaking means,

~~an opening step of the~~ secondary breaking means when a current flowing in these said secondary breaking means is lower than a preset opening current threshold value following detection of a fault at ~~the second detection step~~ said second detecting, and

~~a first closing step of the~~ main breaking means after a preset time delay.

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21. (Currently Amended) The electrical protection process according to claim 20, comprising:

~~—a second opening step of the main breaking means~~
~~commanded by transmission of a priority opening command signal~~
~~on a communication line connected between the secondary breaking~~
~~means and the main breaking means, said priority signal being~~
~~transmitted when a fault current flowing in a secondary breaking~~
~~device is detected, and~~

~~—a second closing step of the main breaking means after an~~
~~end of transmission of said priority signal step.~~

22. (Currently Amended) An electrical protection process for an electrical distribution device comprising:

~~—a first step of detection of detecting an electrical~~
~~fault in secondary breaking means connected by a distribution~~
~~line and a communication line to main breaking means,~~

~~—a step of beginning of transmission of transmitting a~~
~~priority opening command signal on said communication line to~~
~~command opening of the main breaking means,~~

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~~—a first step of opening of the main breaking means~~
commanded by transmission of said priority opening command
signal on said communication line,

~~—a second step of opening of the secondary breaking means~~
when a current flowing in secondary breaking these means is lower
than a preset opening current threshold value following
detection of a fault at ~~the first detection step~~ said first
detecting,

~~—a step of end of transmission of~~ ending transmitting the
priority opening command signal, and

~~—a step of closing of the main breaking means after the~~
~~end of transmission of the priority opening command signal step~~
said ending transmitting the priority opening command signal.